

INSTRUCTIONS
FORM F18b
External Floating Roof Storage Tanks

Department of Environmental Quality
Division of Air Quality
P.O. Box 144820
Salt Lake City, UT 84114-4820
Telephone (801) 536-4000

Storage Vessel ID	Provide identification number.
SCC	Enter the appropriate Source Classification Code (SCC). See General Instructions for explanation.
Type of Material Stored	List the type of liquid stored in the tank (i.e., gasoline, crude oil, jet naphtha, etc.). Please make sure that the products stored are listed in Tables 7.1-2,3&5 of AP-42, 5th edition. If they are not listed, use the Supplement Form 18-19 to provide data for TANKS 4.09 (see Note).
Storage Capacity	Storage capacity should be in 10 ³ gal.
Tank Diameter	Tank diameter should be in ft.
Shell Condition	Describe the condition of the tank shell (i.e., light rust, dense rust, or gunite lining).
Paint Color/Shade	Describe the color and shade combination of the paint on the shell of the tank (i.e., white/white, aluminum/specular, aluminum/diffuse, gray/light, gray/medium, and red/primer).
Paint Condition	Describe the condition of the paint on the sides (shell) of the tank (i.e., good or poor).
Tank Construction	Enter either welded or riveted.
Roof Type	Enter pontoon or double deck.
Roof Fitting Category	Enter typical, controlled, or detail.
Primary Seal	Report the type of primary rim seal (i.e., vapor-mounted, liquid-mounted, or mechanical shoe).
Secondary Seal	Choose weather shield, or rim-mounted, or none.
Avg. Surface Temp. (optional)	Enter average surface temperature of the liquid in °F.
Surface Vapor Press. (optional)	Provide average vapor pressure of the liquid in pounds per square inch absolute (Psia).
Molecular Weight	Provide the molecular weight of the liquid stored in the tank.
Annual Turnovers	Calculate the number of the turnovers per year by dividing the net

	throughput by the storage capacity.
Annual Total	Provide annual total throughput in 10 ³ gal.
Standing Loss	Report all standing losses which include rim seal and roof fitting losses in tons per year.
Withdrawal Loss	Report withdrawal loss in tons per year.
Total Loss	Enter the sum of standing loss and withdrawal loss.
Estimate Code	Choose an estimate code from Table II of the General Instructions.
Vapor Recovery % Control Efficiency	Provide vapor recovery efficiency if the tank has a recovery system.
Comment	Provide any additional information necessary for calculation of emissions

Note:

The U.S. EPA recommends the use of the latest version of TANKS (currently version 4.09) for the estimation of emissions from storage tanks. TANKS is designed for use by local, state, and federal agencies, environmental consultants, and others who need to calculate VOC emissions from organic liquid storage tanks.

TANKS is a Windows-based computer software program that computes estimates of volatile organic compound (VOC) emissions from fixed- and floating-roof storage tanks. TANKS is based on the emission estimation procedures from Chapter 7 of EPA's Compilation Of Air Pollutant Emission Factors (AP-42), plus recent updates from the American Petroleum Institute. A user's manual, included with the program, explains the many features and options of TANKS. The program includes on-line help for every screen.

The software can be downloaded from the EPA web page in a ZIP format from:

<http://www.epa.gov/ttn/chief/software/tanks/index.html>

or provide the necessary data on Supplement Form 18-19, and DAQ will run the software to estimate the emissions.

Be aware that if you choose to run TANKS 4.09, you must include the full output of TANKS 4.09 with your emissions inventory submittal.